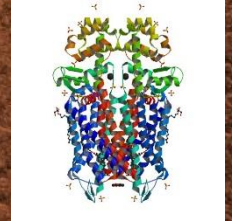


Five Slides in Five Minutes -The Very Basics of Naloxone, Naltrexone, Suboxone, and Methadone.

June 5, 2018

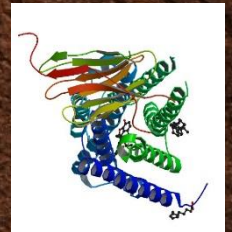
Introduction:

-Opioid Receptor – true characterization did not begin until 1970s

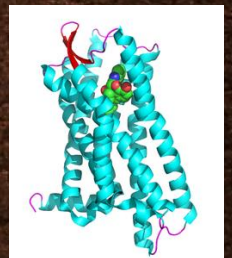


-**mu** — classic “morphine” receptor, general analgesia, respiratory suppression, euphoria, slows gut, pro-nausea, relaxes heart and muscles, lowers blood pressure, site of dependence

-**kappa** — spinal analgesia, dysphoria, psychomimetic, site of dependence, plays role in mood/motivation/addiction, “An Anti-Reward, Dysphoric System”



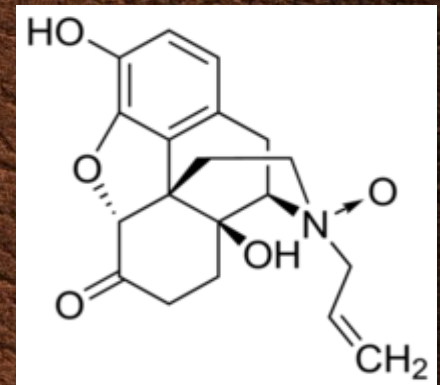
-**delta** — appears to be analgesic and hedonic, may be anti-impulsive and anti-addictive, likely pro-convulsive



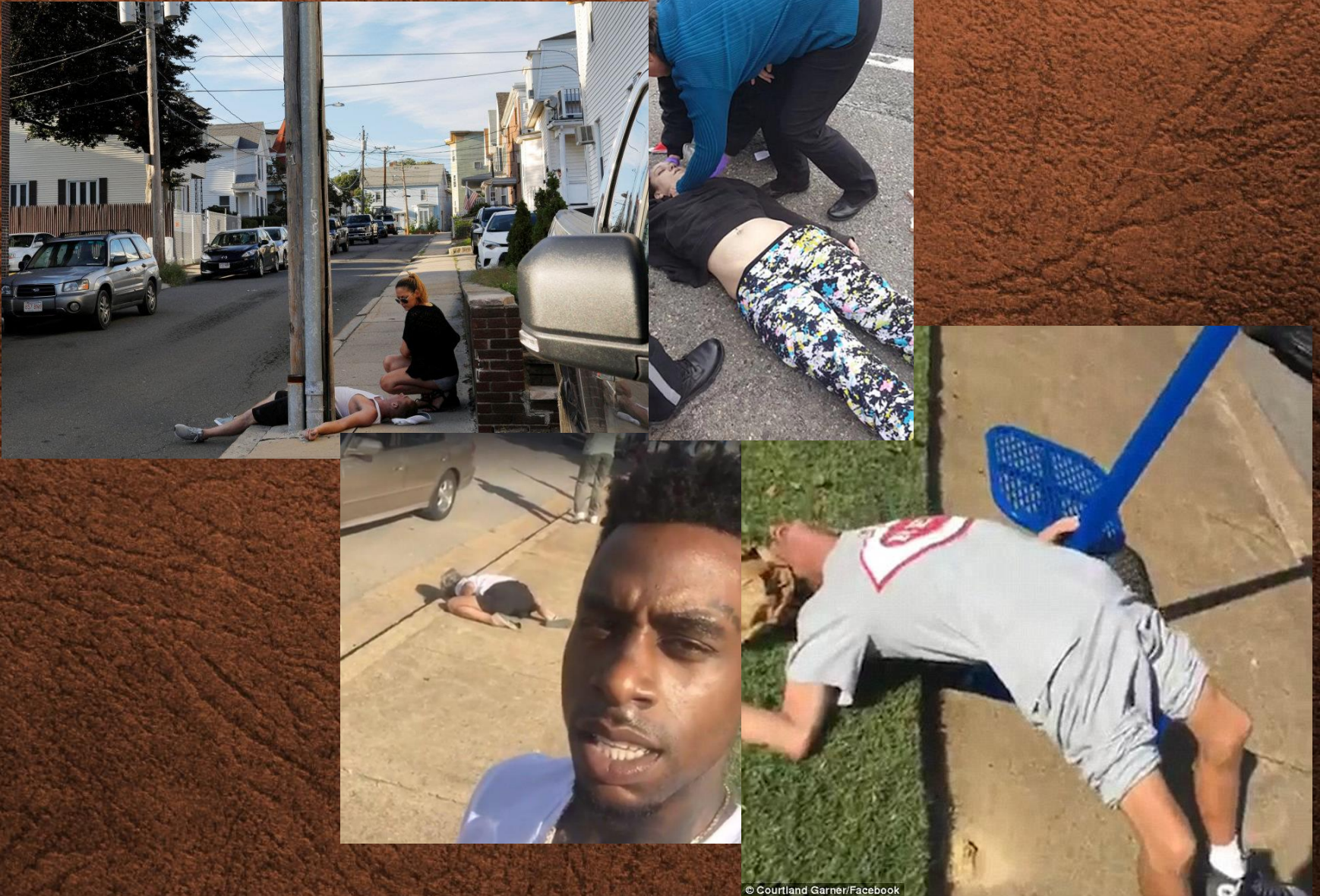
-Naloxone

- full opioid **antagonist** (can cause WD)
- derived from oxymorphone
- preferential effect at mu receptor
- available IV, IM, SQ, intranasal (also effective via endotracheal, sublingual, intralingual, submental routes)
- onset is 1-5 minutes (depending on prep), and lasts 30 to 60 minutes
- is the "-oxone" in Suboxone

-ACUTE REVERSAL



-Naloxone (these slides don't count)



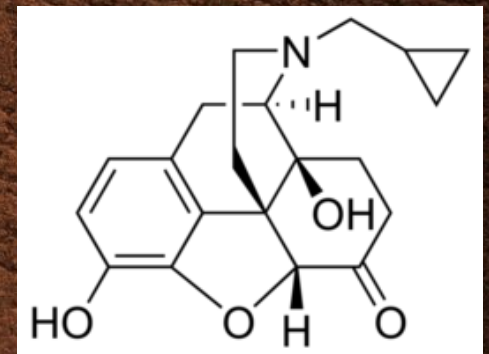
-Naloxone (these slides don't count)



-Naltrexone

- full opioid antagonist (can cause WD)
- also derived from oxymorphone
- preferential effect at mu receptor, but kappa appears to be important
- available PO, IM

-CHRONIC CRAVINGS/BLOCKADE.
OPIOIDS AS WELL AS ALCOHOL.



-Naltrexone (these slides don't count)



-Naltrexone (these slides don't count)



-Buprenorphine

- opioid **partial agonist** at mu and kappa, **antagonist** at delta (can cause WD)
- derived from opioid alkaloid thebaine
- preferential effect at mu receptor
- available sublingual, SQ, and implantable rods
- reduces cravings, restores social function, k/d may explain other helpful effects

-DETOX OR OPIOID MAINTENANCE.

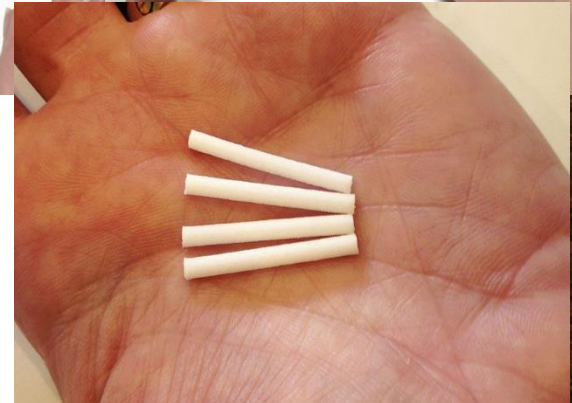
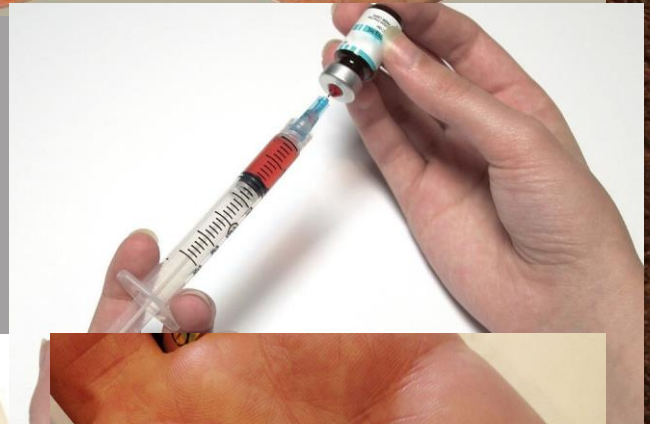
-Buprenorphine (these slides don't count)



-Buprenorphine (these slides don't count)



Suboxone
(buprenorphine and naloxone)



-Methadone

- opioid **full agonist** mostly at mu, and NMDA receptor antagonist
- synthetic opioid, synthesized in 1930s, approved in US in 1940s
- available PO tablet, melt, or liquid
- reduces cravings, restores social function, NMDA may explain other helpful effects

-DETOX OR OPIOID MAINTENANCE.

- **Methadone** (these slides don't count)



- Methadone (these slides don't count)



Disclosures:

Alkermes Speaker Bureau

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